WHAT'S WRONG

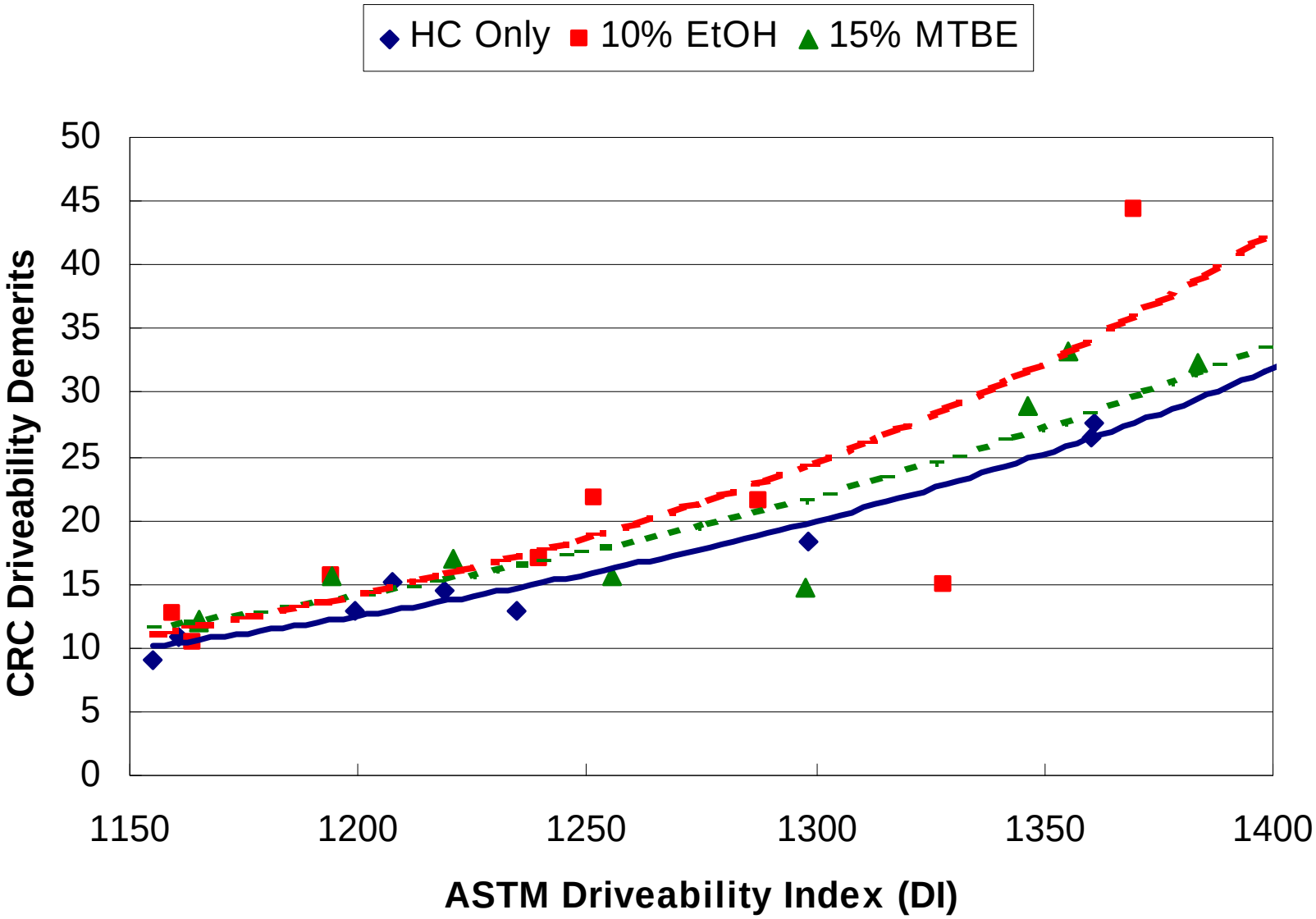
WITH A DRIVEABILITY INDEX

SPECIFICATION ?

Driveability Index Specification Not Justified as Part of Emissions Control Program

- Emissions controlled by Predictive Model which includes distillation parameters
- Driveability Index defines acceptable vehicle driveability, not emissions
  - Driveability quality set by ASTM
- California already has a DI specification, based on ASTM D 4814
  - DI summer specification is 1250 with no oxygenate offset
  - Level is supported by recent 3 year CRC program (96-98)
  - Oxygen offset being investigated next summer
- Average CA RFG summer DI is 1100 with no samples above 1200 (API/NPRA survey)

1996 CRC Program
Summer Driveability (50-70°F)



Conclusions From CRC DI Data

- **There is no need to control DI below the current ASTM 1250 maximum limit.**
  - **Driveability performance differences in the range of 1150 to 1250 DI are very small.**
  - **Below 1250 DI, demerit differences between fuels have no practical significance. A trace driveability problem as determined by a trained rater is equivalent to four demerits. By CRC definition, trace level problems are not noticeable to consumers. During a CRC driveability test, there are dozens of opportunities for trained raters to encounter a trace problem.**
- **Oxygen offsets in the commercial DI range are very small**
  - **Driveability performance differences among HC Only, 10% Ethanol and 15% MTBE are very small below 1250 DI.**
  - **The oxygen offsets developed by CRC and others are based on the entire range of up to 1400 DI and are too large for commercial fuels <1250 DI**
  - **Oxygen offsets are only valid for 10% ethanol and 15% MTBE. There is no data on intermediate oxygenate levels**